AMENDMENTS TO THE SPECIFICATION

Please replace Paragraph [0001] with the following paragraph:

[0001] The present invention relates to antennas. More specifically, the invention relates to a method and apparatus for providing an antenna exhibiting improved ~~RF~~ signal reception and transmission due to reduced levels of ~~RF~~ signal reflection loss and dielectric loss.

Please replace Paragraph [0002] with the following paragraph:

[0002] Electromagnetic wave antennas, and radio frequency (RF) antennas in particular, [Radio frequency (RF) antennas] are widely used to transmit and receive energy in the form of radio waves. RF antennas are available in many different shapes, sizes and configurations. One type of RF antenna is the Cassegrain antenna. Cassegrain antennas have a hyperbolic shaped sub-reflector. The sub-reflector is coaxially aligned with and aimed at an axial center of a main parabolic reflector. The sub-reflector is suspended above the main reflector by either a solid support tube extending from a point near the center of the main reflector, one or more support rods extending from a point near the center of the reflector, or one or more support rods extending from a periphery of the main reflector. When the antenna is in the receive mode the sub-reflector directs RF energy received and reflected by the main reflector to a waveguide (i.e., feedhorn) located at the axial center of the main reflector. When the antenna is in the transmit mode, RF energy transmitted from the waveguide is reflected by the sub-reflector onto the main reflector where the energy is radiated from the antenna.

Please replace Paragraph [0004] with the following paragraph:

[0004] The present invention overcomes prior art deficiencies by providing an antenna exhibiting improved ~~RF~~ transmission and reception capabilities. Unlike previous antennas, the antenna of the present invention does not make use of a solid support tube or solid support rods to support a sub-reflector or other feed device above a main reflector of the antenna. Instead, the present invention provides an antenna having a sub-reflector or other feed device positioned above a main reflector by a perforated support device (dielectric), or support tube, ~~(dielectric)~~ having walls with a low dielectric constant. The perforated support tube permits RF signals to pass through the tube, thus decreasing the signal degradation which would be experienced due to reflection of the signal off the walls of a solid support tube or solid support rods. The perforations may be in the form of holes, slots, or numerous other arrangements.

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Please replace Paragraph [0019] with the following paragraph:

[0019] As seen in Figure 1, an antenna 10 in accordance with a first preferred embodiment of the present invention is shown. The antenna 10 contains a hyperbolic sub-reflector 12 and a parabolic main reflector 14. The main reflector 14 has a first surface 16 and a second surface 18. The sub-reflector 12 is mounted to the first surface 16 by a perforated plastic support tube 20. Electromagnetic wave signals, such as RF signals, received by the first surface 16 are reflected by the sub-reflector 12 to a waveguide in the form of a feedhorn 21. Electromagnetic wave signals, such as RF signals, transmitted through the feedhorn 21 are reflected by the sub-reflector 12 to the first surface 16 and radiate from the first surface 16 into space. RF signals received by

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the antenna 10 are carried from the antenna 10 through a suitable conducting device, such as a coaxial cable (not shown). The conducting device may also carry RF signals to antenna 10 to be transmitted by antenna 10. The conducting device is connected to the antenna 10 by way of a TNC connector 22 disposed on the second surface 18 of antenna 10.